

DISCUSSION OF THE AMENDMENT

Claims 1, 5-9, and 13-24 are active in the present application. Claims 2-4 and 10-12 are canceled claims. Independent Claims 1 and 9 are amended to recite a cellulose acetate butyrate component as part of the adhesive of the adhesive layer. Support for the amendment is found in the previously presented claims. Claims 17-24 are new claims. Support for new Claims 17 and 20 is found in the last paragraph on page 15. Support for new Claims 18 and 21 is found in the last paragraph on page 27. Support for new Claims 19 and 22 is found throughout the specification, in particular, the first full paragraph on page 17. Support for new Claims 23 and 24 is found in the original claims.

No new matter is believed to have been added by this amendment.

REMARKS

The Office Action of September 7, 2007 rejects claims previously indicated as allowable over the prior art of record. The basis for the new rejection appears to be an interpretation of the Supreme Court's recent decision in KSR. Applicants traverse the Office's characterization of KSR and the Office's analysis with respect to the patentability of the previously presented claims in view of the Supreme Court's decision in KSR.

The Office rejected the claims as obvious over the combination of English machine translations of JP 2000-338306 (JP '306) and JP 06-157791 (JP '791).

With respect to JP '306 Applicants note that the cited prior art does not disclose or suggest an antireflection film having the structure of the anti-reflection film of present Claims 1 and 9. Each of Claims 1 and 9 require the presence of a metal oxide-containing layer (e.g. the high refractive index layer) that is at least partially impregnated with an adhesive layer. The JP '306 metal oxide-containing layer is one that contains conductive metal oxide particles and an acrylic resin (see claim 2 and paragraph [0009] of the English machine translation of JP '306). The acrylic resin of the JP '306 metal oxide-containing layer is closely associated with the metal oxide particles. Voids which may be present in resin/metal oxide particle combinations made from resins other than acrylic resins are not present between the metal oxide particles of the JP '306 layer. Thus, the surface of the JP '306 layer is in a closed state that does not permit the intrusion (e.g., impregnation) of the JP '306 adhesive layer. This can be compared with the presently claimed invention which requires both (1) the presence of a cellulose resin (e.g., a resin that is not an acrylic resin) and (2) impregnation of a cellulose resin-containing adhesive layer into a neighboring metal oxide-containing layer.

Further still, JP '306 does not disclose an adhesive which contains a cellulose resin.

Likewise with respect to the impregnation of the adhesive layer into the metal oxide-containing layer, JP '791 discloses a process by which a composition containing a radiation curable resin and a cellulose resin is applied to a film made from a triacetyl cellulose resin. In JP '791 the underlying triacetyl cellulose film is already in a cured state. Therefore the cellulose resin-containing composition can not impregnate the JP '791 triacetyl cellulose film and JP '791 does not disclose or suggest this feature of the presently claimed invention.

Arguendo, if one were to use the hard coat layer of JP '791 as the JP '306 adhesive layer there would not be voids by which the adhesive layer could impregnate the metal oxide-containing layer because, as explained above, the acrylic resin-containing layer of JP '306 does not have impregnable voids.

Inferior solvent resistance and inferior adhesion are two undesirable consequences of the inability of the JP '306 adhesive layer to impregnate the metal oxide-containing layer. This stands in stark contrast to Applicants' disclosure of the presently claimed invention, see for example page 21, line 17 through page 22 line of the original specification reproduced below for convenience:

By adding the cellulose resin to the adhesive, the strength of the antireflection film can be enhanced, as well as its resistance to organic solvents such as alcohols. While the underlying mechanism for this enhancement of the solvent resistance is still unclear, it is hypothesized that the polar OH groups, having high affinity to the metal oxide fine particles in the high refractive index layer, act to improve the solvent resistance of the antireflection film. According to the present invention, the high refractive index layer (2b) is impregnated with the adhesive by applying the coating liquid of the adhesive onto the antireflection layer (2). In particular, the high refractive index layer (2b) is readily impregnated with the curable monomer component contained in the adhesive. The curable monomer component with which the high refractive index layer (2b) has been impregnated cures when irradiated with ultraviolet rays or other active energy rays after the antireflection film for transfer is transferred to the article. When the cellulose resin is present in the adhesive, the high refractive index layer (2b) is impregnated with the cellulose resin together with the curable monomer component, and the cellulose resin is

distributed in the adjacent region of the metal oxide fine particles since the cellulose resin with its polar groups has high affinity to the metal oxide fine particles. As a result, the curable monomer component of the adhesive is also distributed in the proximity of the metal oxide fine particles. This allows the curing reaction of the curable monomer component to take place as effectively in the proximity of the metal oxide fine particles as elsewhere. This in turn ensures a high strength, a good adhesion and an increased solvent resistance of the high refractive index layer (2b).

The effect of the presently claimed invention is shown in the examples of the specification where a description of inventive and comparative examples is disclosed (see pages 26-34). Each of Examples 1 and 2 is made according to the presently claimed invention and include a cellulose resin having an ester bond (cellulose acetate butyrate, a.k.a. CAB). Comparative Example 1 does not contain a cellulose resin. The performance properties of the inventive and comparative compositions are compared on pages 33 and 34 (see below; bold added for emphasis).

The results of the evaluation of the sample of **Example 1** are as follows: **No scratches were formed on the surface of the antireflection layer in the solvent resistance test.** The antireflection layer of the sample of Example 1 showed high strength when subjected to the harsh environment. Reflectance at 550 nm=1.6%; Transmittance at 550 nm=96%; Pencil hardness=H; Adhesion in the Cross-cut test=100/100.

The results of the evaluation of the sample of **Example 2** are as follows: **No scratches were formed on the surface of the antireflection layer in the solvent resistance test.** The antireflection layer of the sample of Example 2 showed high strength when subjected to the harsh environment. Reflectance at 550 nm=1.6%; Transmittance at 550 nm=96%; Pencil hardness=H; Adhesion in the Cross-cut test=100/100.

The results of the evaluation of the sample of **Comparative Example 1** are as follows: Unlike the sample of Example 1, **slight scratches were found on the surface of the antireflection layer in the solvent resistance test.** Reflectance at 550 nm=1.6%; Transmittance at 550 nm=96%; Pencil hardness=H; Adhesion in the Cross-cut test=100/100.

Unlike the Comparative Example, inventive Examples 1 and 2 formed no on the surface of the antireflection layer in the solvent resistance test. Thus, the anti-reflection film of the claimed invention which includes a cellulose resin-containing layer impregnated into a metal oxide-containing layer is superior to the antireflection films that do not meet the limitations of Claims 1 and 9.

With respect to the subject matter of the dependent claims, neither of the JP '791 or JP '306 English machine translations disclose cellulose acetate butyrate as a component of an adhesive layer of an antireflection film for transfer (see new dependent Claims 23 and 24). Applicants submit that the claims that require the presence of cellulose acetate butyrate are further patentable over the prior art of record because the prior art of record does not disclose cellulose acetate butyrate in an adhesive layer of an antireflection film for transfer.

The Office appears to be of the belief that it would be obvious to select cellulose acetate butyrate as the cellulose resin ester now recited in the claims (see lines 3-7 of page 3 of the September 4 Office Action). Applicants submit that the Office has provided no basis for making such an assertion. This is especially relevant in view of the fact that cellulose acetate butyrate is not disclosed in the cited prior art.

How could one of ordinary skill in the art be led to a composition comprising cellulose acetate butyrate when the cited prior art does not suggest or disclose cellulose acetate butyrate?

Applicants also draw the Office's attention to the inventive and comparative examples of the specification which were discussed above. New Claims 23 and 24 require that the cellulose resin is cellulose acetate butyrate.

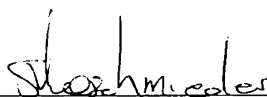
Applicants draw the Office's attention to new dependent Claims 19 and 22 which are drawn to cured antireflection films. The films of new Claims 19 and 22 include metal oxide fine particles that are crosslinked with the curable component of the adhesive layer.

Applicants submit that the cured antireflection film of Claims 19 and 22 is patentable over the prior art relied on by the Office on the ground that the applied art does not disclose such a structure.

For the reasons discussed above, Applicants submit that the presently pending claims are now in condition for allowance. Applicants request the withdrawal of the rejection and the passage of all now-pending claims to allowance.

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